



Participation in Continuing Professional Education of Emergency Room Nurses in Finland: What Influences Motivation?

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ABSTRACT

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The purpose of the study was to describe the influencing factors which motivated emergency room nurses to participate in continuing professional education (CPE). This study also was intended to identify the current state of CPE among the emergency nurses and determine what kind of education activities emergency nurses found motivating. Previous research has shown that motivation is one of the most important factors identified as contributing to participation and engagement in CPE. Continuing professional education is fundamental for making sure healthcare workers have the most updated skills and knowledge in order to practice safely and effectively as research and evidence-based practice continue to bring new information into a rapidly changing healthcare industry.

The theoretical background of the research was based on adult learning theory, and motivation was approached by self-determination theory. The research design was a quantitative cross-sectional survey. Data was collected with a structured web-based questionnaire developed for this study by the researcher and it was analysed using descriptive quantitative analysis. Research was conducted in two large emergency departments located in the HUS- Hospital District of Uusimaa in southern Finland; the Meilahti Tower Hospital and the Töölö Hospital. The questionnaire was sent to 120 staff and a total of 40 nurses completed the survey.

It was found that emergency nurses were more likely to be motivated by educational activities which would increase their feeling of competence and development of a mastery over the task that was important for their job. The results also indicated that the amount of years of general nursing experience and emergency nursing experience had an effect on the need for competency.

The results of this study can be used to identify and develop motivating CPE activities to better meet emergency nurses' needs in the future. It is important for the managers and leaders supporting the CPE activities to understand the factors that motivate nurses to participate.

Key words: continuing professional education, professional development, emergency, nurse, motivation

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1 INTRODUCTION

Today's world demands competent and safe healthcare. It obligates individual professionals to deliver care using the most up to date skills, competencies and knowledge. Lifelong learning has become part of the healthcare professional's daily life. Something that is determined to be correct now might be changed tomorrow as research and evidence-based practice are pursuing new information in a rapidly changing healthcare industry. Continuing professional development (CPD) and continuing professional education (CPE) are fundamental for making sure that healthcare workers have the most updated skills and knowledge in order to be able to practice safely and effectively (Cooper, 2009, p.501). Many studies (Brekelmans, F. Poell, & van Wijk, 2013; Murphy, Cross, & McGuire, 2006; Schweitzer DJ & Krassa TJ, 2010) have shown that motivation is a key driving force for the participation of educational activities, and it can be influenced by intrinsic or extrinsic factors. Nurses around the world have an obligation to their patients, their profession and themselves to maintain and enhance their knowledge and skills required to deliver professional care throughout their career. Emergency nursing is a specialty in which nurses must be able to perform a large variety of skills in rapidly changing situations. In the context of Emergency Nursing, continuing education is fundamental, and the offering of education activities needs to be motivational in order to enhance the nurses' participation.

1.1 Research topic

The topic of this thesis is the continuing professional development of emergency room nurses in Finland. Research will try to describe many of the factors which are influencing the nurses' motivation to participate in continuing professional development activities and will also address what kind of education activities nurses find motivating. Studies have shown (Brekelmans et al., 2013) that motivation is one of the most important factors contributing to participation and engagement in continuing professional development and education. Research was conducted in two large emergency departments located in the HUS- Hospital District of

Uusimaa; Meilahti Tower Hospital and the Töölö Hospital, both located in southern Finland. These two emergency departments will be integrated into one larger emergency department when the Siltasairaala Project is completed in 2024. The theoretical background of the research is based on adult learning theory and motivation is approached on the basis of self-determination theory.

1.2 Research questions

The aim of the study is to describe the factors which influence and motivate emergency room nurses to participate in continuing professional development. It will also identify the current state of continuing professional development among the emergency nurses in the Meilahti Tower and Töölö Hospital emergency departments and determine what kind of education activities emergency nurses find motivating. The results of this study can be used to identify and develop motivational continuous education activities to better meet emergency nurses' needs in the future. It will also be important to explore the possible differences in the influencing factors between the nursing staffs of the two hospitals, since the units are currently going through the integration process mentioned previously. It is important for the managers and leaders supporting the continuing professional development to understand the factors that motivate nurses to participate. Understanding these factors will benefit the nurses, patients, employers and the quality of health care in general (Schweitzer DJ & Krassa TJ, 2010 p. 446).

Research question:

What are the influencing factors which motivate emergency room nurses in the Meilahti and Töölö hospitals to participate in continuous professional education?

Sub-questions

1. In which kind of continuous professional education activities do emergency room nurses in the Meilahti and Töölö hospitals currently participate?
2. In which kind of continuous professional education activities do emergency room nurses in the Meilahti and Töölö hospitals find motivating?

1.3 Research approach

The purpose of the research is to describe factors which are influencing the motivation of emergency room nurses to attend continuing professional education. This type of research problem can be approached quantitatively by using survey design methodology. Survey design is a quantitative research method in which a survey questionnaire is administered to a group of people to identify trends in attitude, opinions or behaviour. Since the data was collected at one point, the survey design was cross-sectional. (Creswell, 2012 p. 375-377.) The survey was carried out in two large emergency departments in southern Finland. An online survey questionnaire (Appendix 2.) was send to the respective nursing staffs to elicit information regarding their background demographics and a self-rating scale, developed by the researcher, was used to collect the data on the factors influencing the participation in continuing education. The data was analysed by using descriptive quantitative analysis.

2 THEORETICAL BACKGROUND

2.1 Continuing professional development and Continuing professional education

Continuing professional development (CPD) and continuing professional education (CPE) are used to describe activities that raise professionals to a level of expertise that meets the requirements of good care and professional standards. They both contain elements of a continuous lifelong learning process, involving the development of the nurses' professional skills, knowledge and attitude in order to improve the quality of emergency care. However, the term CPE is focusing more on formal, compulsory training and education courses, whereas CPD also includes self-initiated learning activities. CPE activities are usually short term, specific learning programs which usually lead to certificate and continuing education units or contact hours. (Brekelmans, 2016 p. 14.)

There are several definitions of both the terms in the international context of education. It is important to understand the main differences between these two and the correct use of the terminology, especially for those who are planning the education activities. This study is focussed on describing the factors which influence the motivation of emergency room nurses to attend continuing professional education sessions which are more formal, structured education activities to enhance the skills and knowledge of the nurses. Typical examples are conferences, workshops, online courses, in-service trainings and simulation activities.

The following table (Table 1) includes definitions of continuing professional development and continuing professional education by the The Nursing and Midwifery Board of Ireland (NMBI), World Health Organization (WHO) and Institute of Medicine (IMO).

TABLE 1. Definitions for continuing professional education and continuing professional development

<p>The Nursing and Midwifery Board of Ireland (NMBI)</p> <p>“Continuing professional development (CPD) encompasses experiences, activities and processes that contribute towards the development of a nurse or midwife as a health care professional. CPD is, therefore, a lifelong process of both structured and informal learning. Continuing education (CE) is a lifelong learning process which takes place after the completion of the pre-registration education and training, and is a vital component of CPD. It consists of planned learning experiences which are designed to augment the knowledge, skills and attitudes of registered nurses and registered midwives for the enhancement of nursing and midwifery practice, education, leadership and research.” (“NMBI - NMBI Scope of Practice: Continuing professional development,” 2015.)</p>
<p>World Health Organization (WHO)</p> <p>“Continuing professional development (CPD) refers to educational activities conducted after graduation to maintain, improve and adapt the knowledge, skills, attitudes and practices of health professionals, so that they can continue to safely and effectively provide health services.”(World Health Organization, 2013.)</p>
<p>Institute of Medicine (IMO)</p> <p>” Continuing Education (CE) serves to update and reinforce knowledge (e.g., management of heart attacks, diagnosis of HIV). It’s Frequently based on acquiring credits and may be considered a subset of continuing professional development. Continuing professional development (CPD) deals with personal, communication, managerial, and team-building skills in addition to content. CPD may be based on acquiring credits or on processes of self-accreditation and reflection (e.g., personal portfolios.) Systems for monitoring CPD require flexibility so professionals can participate in a variety of CPD activities.”(Institute of Medicine, 2010.)</p>

2.1.1 CPD and CPE in the international concept

Internationally, the policies and requirements for CPD and CPE of healthcare providers are very diverse. In some of the countries, continuing education units (CEU) or continuing medical education (CME) are required for healthcare license re-certification. In Asia, e.g. Singapore has required CME's for physicians to maintain their licenses since 2005, whereas in Malaysia only the public-sector professionals are required to participate in CPE, while private doctors are not. In the United States, the CEU and CME requirements are set by the medical and nursing state boards. In Latin America, most of the policies regarding professional education are guided or provided by professional associations. In the European Union (EU), 17 of the member states require CPD for some cadres of health workers, and many of the remaining 10 EU members have guidelines encouraging participation. (Giri et al. 2012, p.2.) The EU Directive the Recognition of Professional Qualifications and Regulation (2013/55/EU) states that member states should encourage continuous professional development for the healthcare personnel and ensure that their skills, knowledge and competences are updated in order to maintain a safe and effective practice.

2.1.2 Continuing professional education in Finland

In Finland, health care professionals' continuing professional education (CPE) is regulated by the following acts and decree:

- Health Care Act 1326/2010
- Occupational Health Care Act 1383/2001
- Health Care Professionals Act 559/1994
- Decree of the Ministry of Social Affairs and Health on further education of Healthcare professionals (1194/2003)

The Ministry of Social Affairs and Health has also issued recommendations for CPE for health care staff. The EU directive 2013/55/EU gives guidelines for member states regarding CPD for healthcare professionals. The English versions of the acts and decree use the term further education instead of CPD. To be consistent, I will refer to the term continuing professional education here, since it is closer to the definition of further education.

According to The Act of Health Care Professionals (1326/2010), each health care individual is obligated to take part in further training and must maintain and improve their professional knowledge and skills required to carry on their professional activities. Employers of health care professionals are responsible for creating opportunities for participation in further training. The Health Care Act (1326/2010) lays down provisions for local authorities (county) and joint municipal authorities for hospital districts to ensure that health care personnel will undertake adequate supplementary health care training. When planning the training programs, the basic training of the personnel, the job requirements and tasks required of the personnel need to be taken into account. According to the Employment Contracts Act, an employer is obligated to maintain and improve employees' competence in the skills and knowledge required to perform their work. The Act on Financially-Supported Development of Professional Skills (1136/2013) details the types of financial support an employer can apply for when arranging the CPE.

The Decree On Further Education Of Healthcare Professionals (1194/2003), issued by the Ministry of Social Affairs and Health, determines that CPE is to be based on the education plan made by the healthcare units and the content must support set learning objectives. The amount of annual CPE depends on the basic training of the employee, his or her work description, workload and professional development needs. The Finnish Government Principle from 2002 states that all healthcare professionals should receive approximately 3-10 days of CPE annually (STM 2004, 25). The employees' Work units are responsible to monitor the amount, participation levels and costs of the further education. The Ministry of Social Affairs and Health (STM 2004, 13) gave recommendations for further education for health care staff in 2004. The recommendations apply to planning, implementing, monitoring and evaluation of the CPD.

The EU Directive on the Recognition of Professional Qualifications and Regulation (2013/55/EU) states that member states should encourage continuous professional development for healthcare personnel and ensure that their skills, knowledge and competences are updated in order to maintain a safe and effective level of practice.

The National Supervisory Authority for Welfare and Health (Valvira) grants the right to practice as a licensed nurse in Finland. This is a one-time application and there is no re-licensure system or requirements. The Terhikki is nationwide register maintained by Valvira. It contains information on Finnish health care professionals and part of it is open to the public to search for information on healthcare providers.(Valvira 2018) As there are no requirements for re-licensing, once nurses have been granted the right to practice, their registration is permanent and can only be withdrawn due to severe malpractice.

An aging population, new medical treatments, research results and new technology will challenge the effectiveness of worldwide healthcare systems going forward. The skills, competencies and knowledge required from healthcare professionals are continuously expanding and changing. In order to meet these challenges, continuing professional education for nurses is essential. In Finland, CPE is legislated by several different laws and a decree. There are also several recommendations by the Ministry of Social Affairs and Health and The Finnish Nursing Association. However, more specific and detailed national policy with guidelines for CPE needs assessment, mandatory requirements, monitoring and evaluation should take place in Finland.

2.2 Factors influencing participation for continuing professional development (CPD) and continuing professional education (CPE)

Reasons for participating in continuing professional development range from intrinsic or extrinsic motivation to valuing lifelong learning (Schweitzer DJ & Krassa TJ, 2010, p.441). Extrinsic motivation is usually derived from outside factors, such as seeking approval or attaining credentials. External motivators might be promotion, recognition or earning certificate. Extrinsic rewards can boost motivation

in the short term, but unless the rewards are enhanced over time, they might lose their effectiveness. Alternatively, intrinsic motivation is more internal to the person and is grounded in challenge, curiosity and mastery. Intrinsic motivators can be intellectual challenge or personal satisfaction. (Merriam & Bierema, 2014 p.147.)

A professional development system must encourage a passion to engage in life-long learning to remain in life-long mastery. An environment that fosters the elements of competence, autonomy and relatedness will prime and encourage individuals to become passionately engaged. Therefore, intrinsic motivation can be the key for maintaining the status of a master. (Tranquillo & Stecker, 2016, p.198.)

Brekelman (2013) carried out a Delphi study among Dutch healthcare experts to identify the factors that influence the participation of Dutch nurses in continuing professional development. He identified six main factors that were deemed to influence participation: CPD registration system, the attractiveness of the nursing profession, identification with the nursing profession, opportunities for workplace learning, the line manager as role model and attractiveness of the education program.

Murphy (2006) investigated the motives of nurses in Ireland for participation in continuing professional education and found that the main motivators were improving self-esteem and confidence and the expectation of increased opportunities for promotion for those with higher educational qualification. Similar results were also found in a study (Jaradeh & Hamdeh, 2009) which explored Jordanian nurses' experiences of continuous professional development and factors influencing the motivation to participate. Improving performance, increasing professional knowledge, increasing self-esteem and enhancing the status of the profession were found to be the top four motivational factors.

To be able to provide meaningful learning opportunities, nurse educators have to also understand possible deterrents to nurses' participation. Personal factors such as family responsibilities and balancing home-life work and study have been found to be main inhibitors. Lack of employer support such as insufficient study leaves or inability to get time away from work and lack of financial support are

also significant issues. Other factors include the content and quality of CPD activities, lack of professional benefits and peer opinions. (Murphy et al., 2006, p. 370-371; Schweitzer DJ & Krassa TJ, 2010, p. 446-447.)

Attitudes towards to CPD activities can have a significant influence on attendance. Communication related to the required CPD activities, collaborative decision-making and the importance of learning needs assessment are factors which influence nurses' attitudes towards CPD activities. Nurses have to be aware of the importance of the programs and they should also feel they can be involved with the planning and implementation of the programs. Learning needs assessment will help address their individual learning needs and increase the motivation of the nurses to attend CPD activities. (Viljoen, Coetzee, & Heyns, 2017, p. 73-74.)

It is critical, not just to improve participation levels, but to achieve the learning outcomes for continuous professional development and education. To achieve this, it is crucial that educators responsible for planning the activities, managers who enable the opportunities to participate and the participants themselves understand the factors which effect the motivation to participate in continuing education activities. Understanding these factors will also help to create educational activities which nurses find motivating. It is the duty of all those involved to ensure that nurses have the most up to date skills and knowledge in order to provide safe care for their patients.

2.3 Emergency nursing and continuing professional education

Emergency nursing is a specialty which requires nurses to have broad evidence-based knowledge, clinical skills, independent decision-making and critical thinking skills. Emergency nurses are working in fast-paced environments where they are required to make rapid assessments, make critical decisions and perform life-saving interventions. Situations are often unpredictable, requiring prioritization

and multitasking skills. The presentation of patients varies from critically ill or injured to minor medical problems. Most of the emergency departments see patients in all age groups, from infants to the elderly. The skills and knowledge required by emergency nurses are more comprehensive than those for regular nursing licensure. They are very specific to their practice environment and are required for the care of a wide variety of patients. (ENA, 2019) The challenge for emergency nurses is to maintain and continuously enhance their skills, knowledge and competencies to deal with the challenges of emergency nursing. This cannot be achieved without continuing professional education.

In Finland, registered nurses working in emergency departments hold either diploma or Bachelor degrees (BSN) of nursing. Paramedics in Finland are qualified as registered nurses and some of them are working in the emergency departments. Licensed practical nurses can also work in emergency departments, but their scope of practice is limited compared to registered nurses. There are a few post-graduate studies for Emergency Nursing arranged by the Universities of Applied Sciences. By Finnish law (STM 2017), nurses working in an emergency department must have “sufficient skills and knowledge”, however there are no specific requirements for emergency nursing competencies or education.

2.4 Adult learning theory and motivation

Andragogy, the art and science of adult learning, was introduced in 1968 by Malcolm Knowles. He made a total of six assumptions about the characteristics of adult learners:

1. *Self-concept*- adult learners are typically characterized by an independent self-concept and they are more self-directed. Adult learners need to be respected as adults and given the opportunity to engage in self-directing their own learning. Adult education programs should foster the psychological climate of mutual respect and collaboration. (Merriam & Bierema, 2014 p.47-48.)

2. *Experience*- adults' accumulated life experiences are a rich resource for learning. Discussion, simulations, problem based learning and case studies are examples of educational activities where learners are able to draw from their life experiences as a resource for learning. (Merriam & Bierema 2014, p. 49-51.)

3. *Readiness to learn*- the developing and changing social roles of adulthood create the need and readiness for learning. (Merriam & Bierema 2014, p.51-53.)

4. *Problem-centered orientation*- adults are problem-centered learners and they have a desire for the immediate application of the knowledge they have learned. They are motivated to learn in order to be able to deal with an issue, problem or immediate concern. (Merriam & Bierema 2014, p.53-54.)

5. *Internal motivation*- adult learners are mostly driven by internal motivation rather than external. Increased job satisfaction, enhanced self-esteem, improved quality of life and personal fulfilment lead adults to learn. (Merriam & Bierema 2014, p.54-55.)

6. *Need to know*- adult learners usually have a high need for knowing the reason for learning and how the skill or knowledge learned will apply to their immediate situation. Helping adult learners discover for themselves the gaps between where they are now and where they want to be, will help to raise the awareness of the need to know. This will increase internal motivation to learn. (Merriam & Bierema 2014, p.55-56.)

When planning and carrying out education activities for adult learners, it is fundamentally necessary to understand the key characteristic of adult learning. Adult motivation to learn is affected by many variables and context. Adults are usually not motivated to learn if they cannot apply the learned skill or knowledge to their personal or work life, or, if they don't understand the reason for learning. Therefore, helping adults to identify what they need to learn, and why they need to learn it, can help educators plan more engaging and motivating learning activities for adults. Learning needs assessment can be used to reveal these learning gaps.

It is also important to take the social context and their life situations into consideration. A young single nurse can have different readiness to learn than a nurse who is a mother of small children.

2.5 Self-Determination theory

Self-Determination Theory (SDT) represents a broad framework for the study of human motivation and personality. It articulates meta-theory that defines intrinsic and varied extrinsic sources of motivation. These sources can be divided into autonomous motivation (AM) and controlled motivation (CM). AM is determined from three different types of regulation that are generated from within an individual; 1. Intrinsic regulation where activity is done out of genuine interest, 2. Integrated regulation where activity is backed by a person's own beliefs and 3. Identified regulation where individual is consciously valuing an activity. Controlled motivation (CM) is determined from regulations that are generated from external factors. Regulations are 1. Introjected regulation, where activity is not fully accepted as one's own and is mainly originating from internal pressure and 2. External regulation, where activity carried out because of external demands or for rewards. ("Selfdeterminationtheory.org – Theory," n.d.)

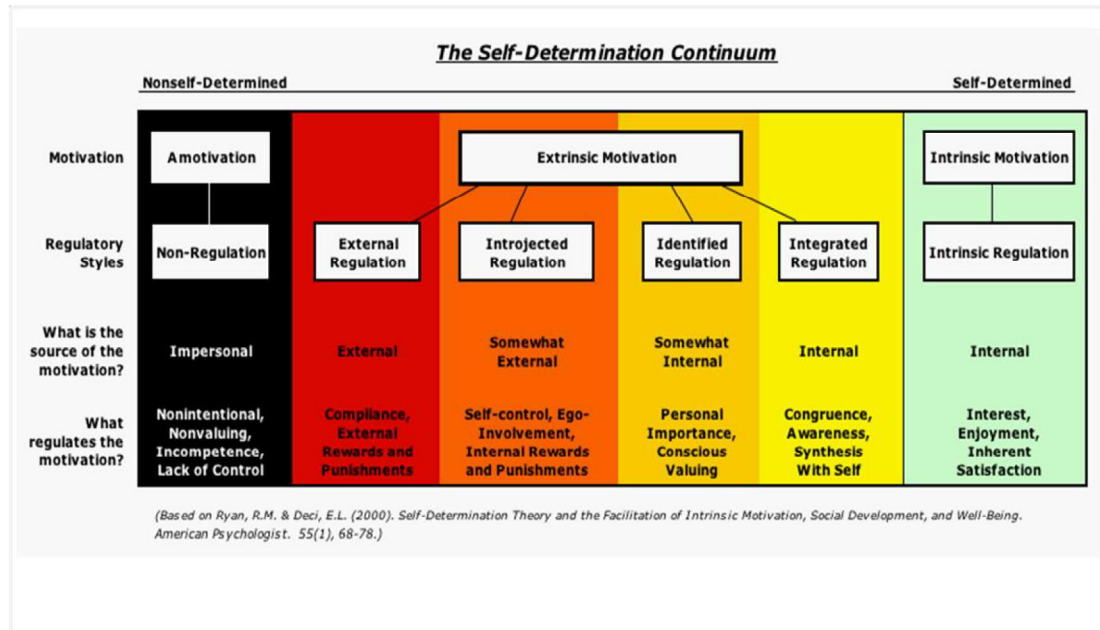
Over the past three decades, the STD framework has evolved into the form of four mini-theories; Cognitive Evaluation Theory, Organismic Integration Theory, Causality Orientation Theory and Basic Needs Theory (Ryan & Deci, 2000 p. 9).

Cognitive Evaluation Theory was formulated to describe the effects of social contexts on people's motivation, behavior and experience. When people are intrinsically motivated, they engage in activities freely and are sustained by the experience of interest and enjoyment. Intrinsic motivation is generally connected to the need for competence and autonomy. According to theory, tangible rewards are predicted to undermine intrinsic motivation by decreasing the individual's feeling of autonomy and prompting a shift toward more externally perceived locus of causality for the rewarded activity. Positive performance feedback is expected to

enhance intrinsic motivation when people feel a sense of autonomy with respect to the activity for which they perceived themselves to be competent. (Deci & Ryan, 2004 p. 10-12.)

The basic assumption for *Organismic Integration Theory* (OIT) is that people are naturally inclined to integrate their ongoing experiences and the different regulatory styles for extrinsic motivations which are developmental outcomes. OIT is looking at motivation as a continuum from amotivation to full intrinsic motivation. (Picture 1.) At the left side of the continuum is amotivation, in which individuals are completely non-autonomous and acting passively. Reasons for amotivation are the perceived lack of value for the activity or its outcomes or the feeling of not being able to achieve desired outcomes because of lack of competence and control. At the right side of the continuum is intrinsic motivation, the pure form of autonomous and self-determined motivation. Here, individuals are self-motivated and motivation is regulated by interest, enjoyment and satisfaction. (Deci & Ryan, 2004 p. 15-17.)

Between these two extremes falls extrinsic motivation, which is characterized by four types of regulation. External regulation is the least autonomous form of extrinsic motivation and an individual's motivation is usually regulated by obtaining reward or avoiding punishments. The next type is introjected regulation, in which motivation is somewhat extrinsic and individuals have partially internalized them. Introjection based behaviors are performed to avoid guilt or shame, or to attain ego enhancements. Identified regulation is a more self-determined form of extrinsic motivation and it is based on individuals' conscious values and personal importance. The fourth type of extrinsic motivation, and the most autonomous form, is integrated regulation. Here, the individual is motivated by intrinsic sources, but behavior is still undertaken to attain a personally important outcome rather than for pure inherent interest and enjoyment. (Deci & Ryan, 2004 p.15-17.)



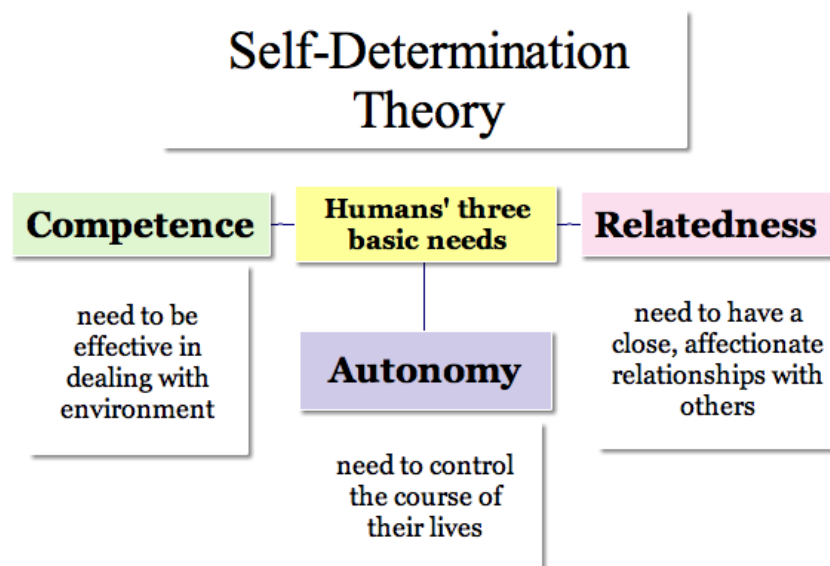
PICTURE 1. Self-Determination Continuum (“Selfdeterminationtheory.org – Theory,” n.d.)

Causality Orientation Theory (COT) was developed to describe individual differences in people’s tendencies to orient toward the social environment. It describes people’s inner resources which, along with social context, effects motivation, behavior and experience. These inner resources have developed over time as a function of prior interactions with social contexts. Causality orientations are a set of general, individual differences of how people adapt and orient themselves to their social context. It defines three orientations; autonomous, controlled and impersonal causality orientation.

Autonomous orientation categorizes the degree to which individuals orient toward the environment as a source of information for making effective choices and are motivated independently over various circumstances. Controlled orientation illustrates the tendency for people to orient toward controls and the environment as if it were influencing the people to think, feel and behave in certain ways. Individuals’ behavior is controlled by directives as to how they should behave. Impersonal orientation represents the degree to which individuals orient to the environment as being an indicator of their incompetence and the degree to which they are amotivated to participate in activities. According to SDT, everyone experiences

causality orientation to some degree. (Deci & Ryan, 2004 p.22; Gagné, 2015 p.20.)

The concept of basic psychological needs has played an important role in SDT and *Basic Needs Theory (BNT)* was formulated to explain the relation of motivation to health and wellbeing. Theory suggests three needs; competence, relatedness and autonomy. (Picture 2.) Competence refers to a need to build competence, express one's capacities and develop a mastery over a task that is important for the individual. The need of competence leads people to seek challenges and enhance their skills to achieve a feeling of confidence and effectiveness in action.(Deci & Ryan, 2004 p.7.) Relatedness means a sense of belonging and connectedness with other individuals and with one's community. Fostering teamwork, mutual respect, reliance on other team member and shared group goals are examples of behavior supporting relatedness. (Gagné, 2015 p.183.) The need for autonomy refers to initiating a behavior out of personal interest, meaning that the individual chooses to engage in something because it's in line with his or her values.



PICTURE 2. Self-Determination Theory and Basic needs theory (Giri et al., n.d.)

The theoretical framework for this research was based on adult learning theory and motivation was approached on the basis of self-determination theory. Motivational factors were divided into intrinsic and extrinsic domains. Intrinsic motivation was approached through the basic need theory and the three basic psychological needs; competence (feeling capable of mastering a task), autonomy (experiencing volition) and relatedness (connecting with peers). According to the STD (“Selfdeterminationtheory.org – Theory,” n.d.) conditions supporting these basic psychological needs foster high motivation for, and engagement in, activities, including enhanced performance, persistence and creativity. SDT also demonstrates that satisfying these three basic psychological needs can contribute to autonomous motivation. In previous research (Tjin A Tsoi, de Boer, Croiset, Kusurkar, & Koster, 2018), autonomous motivation (AM) was demonstrated to be associated with better learning outcomes and positive well-being, unlike controlled motivation (CM), which was associated with poor academic performance and burnout.

3 METHODOLOGY

3.1 Methodology approach

The purpose of the study was to describe factors, which are influencing the motivation of emergency room nurses to undertake continuing professional development. Since this study aimed to identify trends in motivation in a group of nurses, the research problem was approached quantitatively by using survey design. The main purpose of the quantitative research is to measure concepts or variables objectively and to examine, by numerical and statistical procedures, the relationship between them (Parahoo, 2006 p.283). Survey design is a quantitative research method in which a survey questionnaire is administered to a group of people to identify trends in attitude, opinions or behaviour. In the survey design, research data is collected by using questionnaires or interviews, and then is statistically analysed to describe trends in responses to questions and to test the quality of the research questions. Survey studies describe trends in the data rather than offer rigorous explanations.(Creswell, 2012 p.376.) This study is using measurements to answer research questions and the emphasis is to describe factors influencing the motivation, therefore it can be described as a quantitative descriptive study.

In this study, a questionnaire was chosen to be the method for data collection. Utilising a questionnaire is a method that seeks written or verbal responses from people to a written set of questions or statements. The questionnaire was considered to be predetermined, since the instrument was constructed in advance by the researcher. It was also standardised as the same questions were asked to all participants in the same order and it was structured in that the respondents were required to choose the answer from the same Likert scale offered by the researcher. (Parahoo, 2006 p.283.) The advantages and rationale of collecting data from larger group by utilising an online questionnaire were lower costs and a more rapid turnaround. These were the contributing factors for choosing the survey design using a questionnaire for the data collection procedure for the study. Since the data for this research was collected at one point in time, the

survey design is considered to be cross-sectional. This kind of design has the advantage of measuring current attitudes or practices. (Creswell, 2012 p.378.)

3.2 Data collection

3.2.1 Instrument

Data was collected with a structured web-based questionnaire including close-ended questions which participants answered by using the Likert scale 1-5. A web-based questionnaire was the most effective way for the data collection due to the long distance between the researcher and the study groups. The questionnaire was developed for this study by the researcher. The self-determination theory guided the formulation of the questions. The questionnaire was developed in Finnish and then translated into English for report writing. Before pilot testing, the questionnaire was reviewed by two subject matter experts and based on their valuable feedback, some changes were made for the final wording of the questions.

The survey questionnaire consisted of a demographic section in which the following demographics were addressed: 1. How many years of nursing experience, 2. How many years of emergency nursing experience, 3. Highest education level, 4. Continuing education activities in which the nurse has participated or performed in the past year 5. How many hours of continuous professional education has the nurse participated in with the past 12 months? 6. Workplace at the moment. In the motivation section of the questionnaire, the participants were asked to identify to what extent the listed factors will affect their motivation to participate in continuous education activities. The listed factors were divided into intrinsic motivation (Autonomy, Mastery / competence, Relatedness) and extrinsic motivation based on self-determination theory. Responses were given in a five-point Likert scale; 1- not at all, 2- slightly, 3- somewhat, 4- very much and 5- very much.

The questionnaire design was piloted before it was sent to the study group. Pilot testing helps to determinate whether the individuals in the sample group will be

capable of completing the survey and they can understand the questions (Creswell, 2012 p.182). Copies of the questionnaire were sent to six nurses and they were asked to review the document for the clarity of instructions and the question details. Wording in only a few questions was modified based on the feedback. The test group was also asked to report the time they required to answer the questions. The average time to answer the questionnaire was 10 minutes. Since this was a satisfactory result, there was no need to remove any questions.

3.2.1 Population and sample

The population studied consisted of the nursing staff at the Meilahti Tower and Töölö Hospital emergency departments. The Hospital District of Helsinki ja Uusimaa (HUS) is divided into five hospital areas: Helsinki University Hospital, Hyvinkää, Lohja, Länsi-Uusimaa and Porvoo. The Helsinki University Hospital area consists of 17 hospitals, including both the Meilahti Tower Hospital and Töölö Hospital. Both hospitals' emergency departments have their own specialities. The Meilahti Tower Hospital emergency department provides surgical, neurological and internal medicine care. The Töölö Hospital emergency department provides orthopaedic, traumatology and neurosurgery care. Both emergency departments are providing care 24/7 for patients over 16 years old, and admission to the departments is usually with doctor's referral or by ambulance. ("HUS - Home," 2019.)

Both registered nurses and practical nurses were included in the study group. A link to the online survey was sent to 83 nurses in the Meilahti Tower Hospital emergency department and to 46 nurses in the Töölö Hospital emergency department by email, resulting in a total sample size of 123 nurses. The survey was open for 3 weeks, from 18th August to 9th September. Reminder emails to request the nurses to participate in the survey was sent twice during this time. Initially, 47 nurses replied to the survey, but after examining the results it was determined that 7 nurses had only replied to the demographic part, leaving the questions which measured the motivation factors completely blank. These participants were therefore eliminated from the data analysis, resulting in a final participation rate

of N= 40 which equals 31%. In survey design research, it is expected that some questions will be overlooked by some participants and that some individuals simply do not respond (Creswell, 2012 p.182).

The process of quantitative research should reflect objectivity, meaning the study should be free of bias and the researcher should remain outside of the study and avoid involvement or influence with the participants as much as possible. It is the instrument that does the measurement, not the researcher (Parahoo, 2006 p.51). In this study, objectivity was maintained since the researcher was not directly involved with the participants, the link to the survey was forwarded to the nurses by the nursing managers of the respective emergency departments and the data was analysed using statistical tests.

3.3 Data analysis

Data analysis is an important part of the research process and it contains several steps which the researcher needs to follow to be able to make sense of the data in a way such that it can answer the research questions. (Parahoo, 2006 p.375.) In this study the data was analysed by using descriptive quantitative analysis. The first step was to prepare the data for the analysis. The Statistical Package for the Social Sciences (SPSS) program was selected to be used for the statistical analysis and the database was cleaned. From the demographic part of the survey, the highest level of education and current workplace components were removed before entering the data into SPSS. Only three (3) practical nurses replied to the survey, and this would have not been statistically enough to compare the results of the participants with different levels of education. The difference in response ratio between the two hospitals was so significant that the researcher decided not to compare these groups. Two participants had skipped several questions, and for these individuals the missing data was substituted by the computer program. Up to 15% of missing data can be substituted with scores without altering the overall statistical findings (Creswell, 2012 p.182).

Descriptive statistics was used to describe the demographic variables including the years of nursing experience, years of emergency nursing experience, highest education degree, current workplace, the amount and type of continue education undertaken within the last 12 months.

The survey questions were grouped into four domains (sum of variables) of motivation; 1. Intrinsic motivation - Autonomy: questions 1-6, 2. Intrinsic motivation - Mastery / competence: questions 7-14, 3. Intrinsic motivation – Relatedness: questions 15-20 and 4. Extrinsic motivation: questions 21-30. Mean score, median, mode and standard deviation were calculated for each domain and also for all sub-questions. The mean is the total of the scores divided by the number of the scores and is the most popular statistic used, whereas median is presenting the middle score among all scores. The mode is the most frequently appearing score and can be used to find out the most common score in an array of scores for any given variable. Standard deviation is an indicator of spread of the scores. (Creswell 2012, p.184).

Furthermore, analysis of variance (ANOVA) was used to test differences between the means pertaining the and motivation domains related to demographic factors.

The results will be presented and discussed in chapter 4.

3.4 Ethical considerations

There are six ethical principles that apply to all types of research. Beneficence, non-maleficence, fidelity, justice, veracity and confidentiality should always guide the research process. (Parahoo, 2006 p.105.) To benefit the participating individuals, the results of the research can be used to identify and develop motivating continuing education activities to better meet emergency nurses' needs in the future. Prior to the commencement of data collection, permission for the study was sought from the nursing directors from the HUS Akuutti and HUS Tukielinkirurgia service lines to ensure that the research practice would meet ethical standards and hospital policies. To ensure justice and veracity, the nurses were approached by email (Appendix 1.) providing aims and objectives of the planned

study and contact information of the researcher for further questions. Completing a survey was entirely on a voluntary basis. Replying to the survey was considered as implied informed consent and approached individuals could easily refuse participation by not taking the online survey. To maintain confidentiality, the questionnaire did not include any personal information of the participants, therefore the data was completely anonymised. Data was gathered by using an online survey tool protected by a password and only the researcher had access to the survey results.

3.5 Validity and reliability

For the instrument to be considered reliable, the scores from the instrument must be stable and consistent. Scores should be nearly the same when the instrument is administered multiple times and individuals should consistently answer closely related questions in a similar fashion. Validity is the development of evidence to demonstrate that the test interpretation matches its proposed use. (Creswell 2012, p.159.)

The instrument was developed by the researcher so there were no previous reliability or validity scores available. The instrument was pilot tested among six nurses and they were asked to review document for clarity of instructions and the quality of the question options. Based on the feedback, wording was modified in only a few questions. The test group was also asked to report the time they spent answering the questions. Since the average answering time was 10 minutes, this was decided to be an acceptable time for completing the survey. When items are scored as continuous variables (e.g. Likert scale) internal consistency and reliability can be measured by Cronbach alfa (Creswell 2012 p.162). Before the data analysis, a reliability test was performed for the four motivation domains and the demographics. The results (Table 2.) indicated borderline acceptable internal consistency. A relatively low alpha score (0.689) among the four main domains and demographics might indicate inconsistent correlation between the questions when they were grouped. (Tavakol & Dennick, 2011.)

TABLE 2. Cronbach's Alpha motivation domains and demographics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.698	.711	7

To ensure a rigorous process and avoid possible bias, the survey process was similar for all participants. Nurses were approached by email, the content of which was written by the researcher and distributed by the unit manager. This way, the researcher herself was not in direct contact with the participants and the survey was administered in an objective way. Participation in the survey was totally on a volunteer basis and there were no rewards given to bias the motivation to participate. As the survey was sent to nurses' work email addresses, the assumption is that participants replied during their workhours. An emergency department is a very unpredictable environment, and this might have affected participant's concentration. There were 7 participants that only replied to the demographic part of the survey, but not to the questions measuring motivation.

Since the instrument was developed and used only for this study, and there were no previous measurements for validity or reliability, the results were interpreted with caution. If the instrument were to be adapted for future research, the researcher would highly recommend further testing for its reliability and validity.

4 RESEARCH RESULTS

4.1 Introduction

The aim of the study was to describe the factors which are influencing the nurses' motivation to participate in continuing professional education activities, to understand what kind of education activities nurses find motivating and in which type of professional continuing education the nurses are currently participating. The results of this study can be used to identify and develop motivational continuing education activities to better meet emergency nurses' needs in the future. The survey was carried out in two large emergency departments in Finland. An online survey questionnaire (Appendix 2.) was sent to the nursing staff to elicit information regarding their background demographics and self-rating scale, developed by the researcher, was used to collect the data on the influencing factors related to participation in continuing education. The instrument included 30 questions and the participants were asked to select a response by using a 5-point Likert scale (1-not at all to 5- extremely) to indicate to what extent the factors would influence their motivation to participate in continuing education. The survey questions were grouped into four domains of motivation; 1. Intrinsic motivation - Autonomy, 2. Intrinsic motivation - Mastery / competence, 3. Intrinsic motivation – Relatedness and 4. Extrinsic motivation based on Self-Determination Motivation Theory. The survey was sent to a sample of 123 nurses and total of 40 nurses (32%) completed all of the survey questions.

4.2 Demographics

The demographics part of the questionnaire explored the participants' overall nursing experience, emergency nursing experience, their highest education level, the amount and the type of continuing education activities the participants have undertaken within the past 12 months and their current workplace.

Table 3a and 3b illustrate the data related to participants' years of over-all nursing experience. Over half (55%) of the participants were very experienced nurses, holding over 10 years of working experience, while the second biggest group (32,5%) were nurses who had 1-5 years of working experience.

TABLE 3a. Years of nursing experience (N=40).

How many years of nursing experience you have		
Answer Choices	Responses	
< 1 year	0,00 %	0
1-5 years	32,50 %	13
6-10 years	12,50 %	5
> 10 years	55,00 %	22
	Answered	40
	Skipped	0

TABLE 3b.

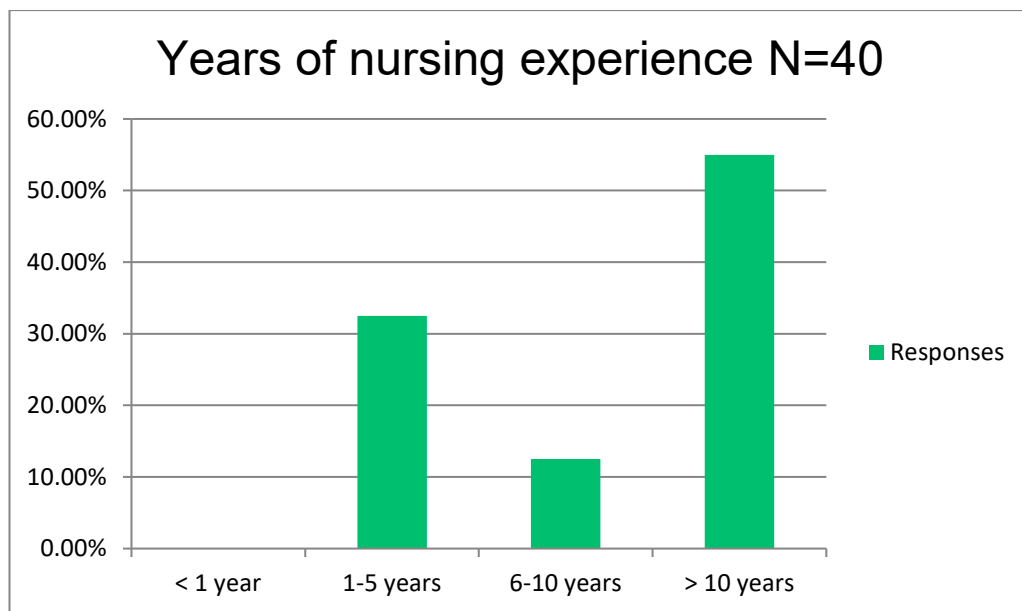


Table 4a and 4b illustrate the data related to the participants' experience in emergency nursing. There was more variation among the emergency nursing experience levels. Most of the participants (42,5%) had over 10 years of experience, the second biggest group (30%) was that of nurses holding 1-5 years of experience while 6-10 years of experience was the third biggest group (22,5 %). Only 2 participants (5%) had less than one year of experience of emergency nursing.

TABLE 4a. Years of emergency nursing experience (N=40)

How many years of emergency nursing experience you have ?			
Answer Choices	Responses		
< 1 year	5,00 %	2	
1-5 years	30,00 %	12	
6-10 years	22,50 %	9	
> 10 years	42,50 %	17	
	Answered	40	

TABLE 4b.

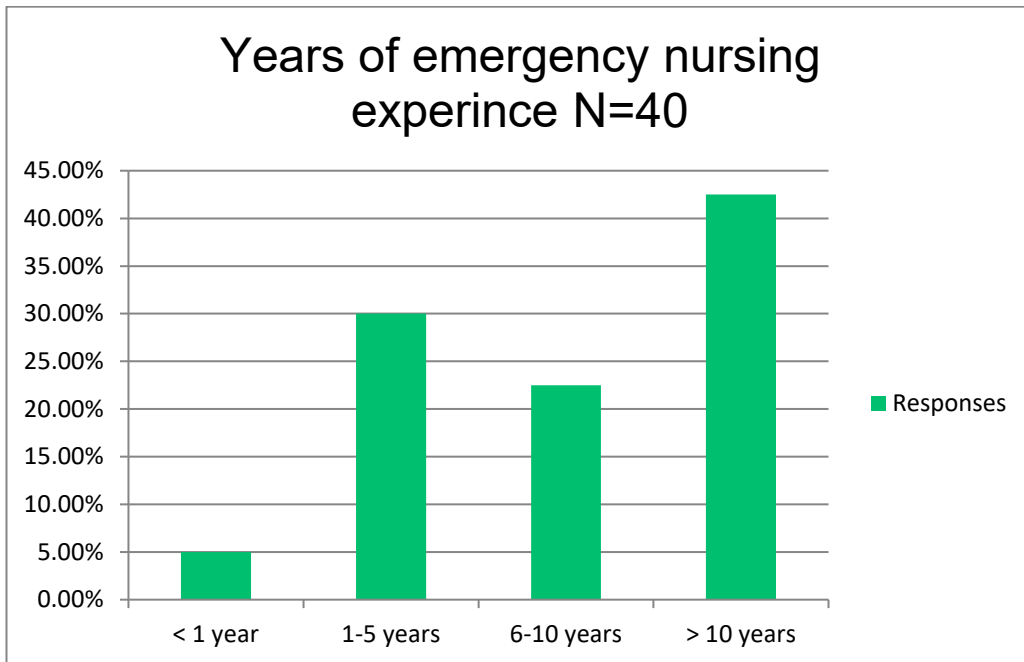


Table 5a and 5b illustrate the highest education level among the participants. The majority of the participants (34 / 85%) were registered nurses and only four (4) participants (10%) were licenced practical nurses or practical nurse technicians. Two (2) of the participants had a Master’s degree. Due the very uneven distribution of highest education levels, this demographic variable was not used in the data analysis pertaining to motivational factors.

TABLE 5a. Highest education level (N=40)

Your highest education level:		
Answer Choices	Responses	
Licensed Practical Nurse (Diploma) or Practical Nurse Technician	2,50 %	1
Vocational upper secondary education- Licensed practical nurse	7,50 %	3
Registered Nurse (Diploma / BSN)	85,00 %	34
Masters Degree (University of Applied Sciences)	2,50 %	1
Masters of Science of Nursing	2,50 %	1
	Answered	40

TABLE 5b.

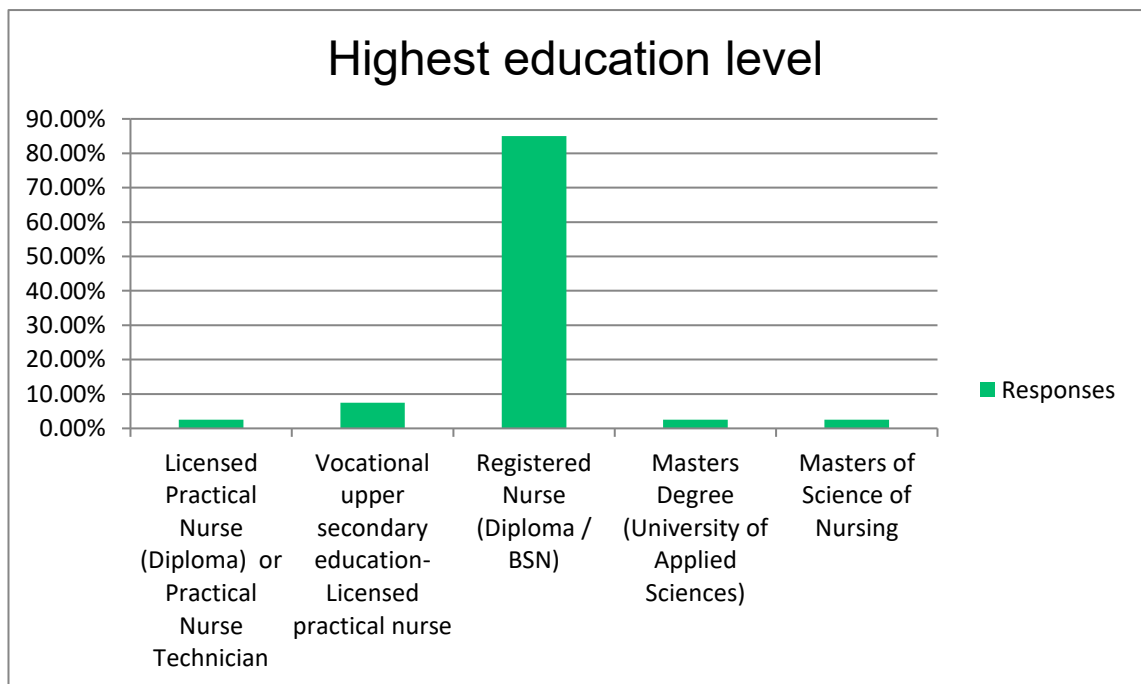


Table 6a and 6b illustrate the continuing education activities in which nurses had participated within the last 12 months. 32 (80%) of the nurses replied that they have participated in a seminar or conference, making this the most popular education activity. 24 (60%) of the nurses participated in simulation education and 21 (52.5%) had in-service education in their workplaces. 17 (42,5 %) of the nurses had participated in some kind of online course and only 4 (10%) of the nurses participated in an internationally recognized course. None of the participants participated in a speciality certification program within the past 12 months. 4 nurses (10%) reported they had participated in the following education activities: YAMK (Master's degree program), OPO 1/ 2 and ETC (European Trauma Course).

TABLE 6a. The continuing education activities in which nurses had participated within past 12 months.

Continuing education activities, in which you have participated within the last 12 months:		
Answer Choices	Responses	
Seminar or conference (Duration 1-2 days)	80,00 %	32
Simulation education	60,00 %	24
In-service education in my workplace	52,50 %	21
Specialty certification programs	0,00 %	0
Online course	42,50 %	17
International course (e.g. European Resuscitation Council Life Support course)	10,00 %	4
Other ?	10,00 %	4
	Answered	40

TABLE 6 b.

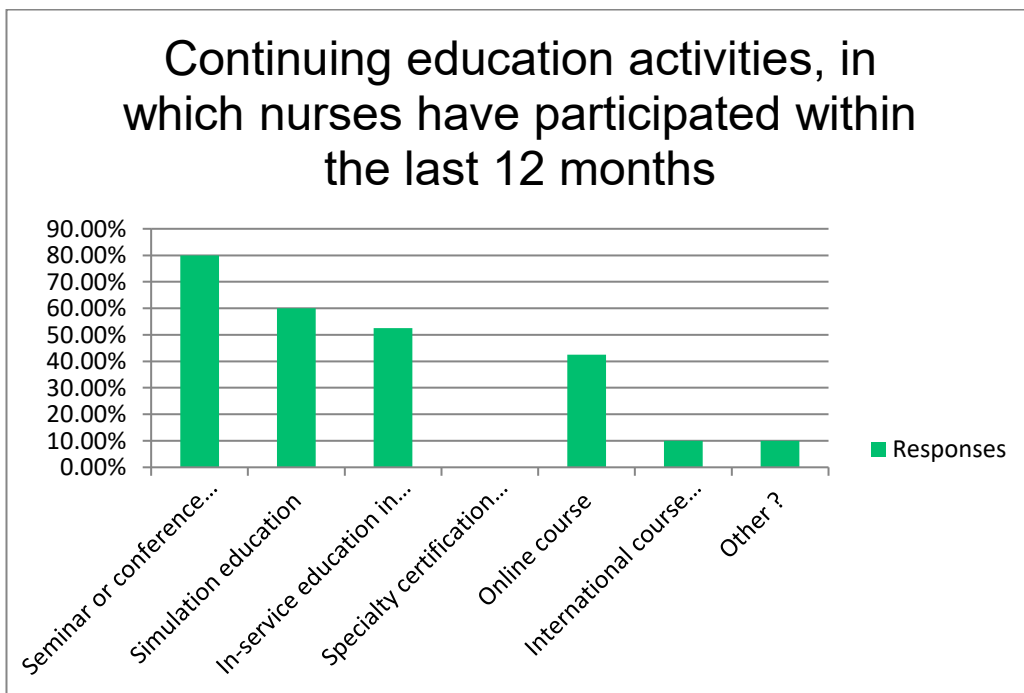


Table 7a and 7b illustrate the amount of education hours in which the nurses had participated within the last 12 months. 15 nurses (37,5%) participated 8-16 hours, 11 nurses (27,5%) 17-24 hours, 8 nurses (20%) participated in more than 24 hours of education, 5 (12.5%) reported they had participated less than 8 hours and one nurse (2,5%) had not participated in any continuing education within the past 12 months.

TABLE 7a. The amount of continuing education hours in which nurses had participated within the last 12 months.

How many hours of continuing professional education have you participated in within the last 12 months?		
Answer Choices	Responses	
0 hours	2,50 %	1
< 8 hours (< 1 workday)	12,50 %	5
8-16 hours (1-2 workdays)	37,50 %	15
17-24 hours (>2-3 workdays)	27,50 %	11
> 24 hours (>3 workdays)	20,00 %	8
	Answered	40

TABLE 7b.

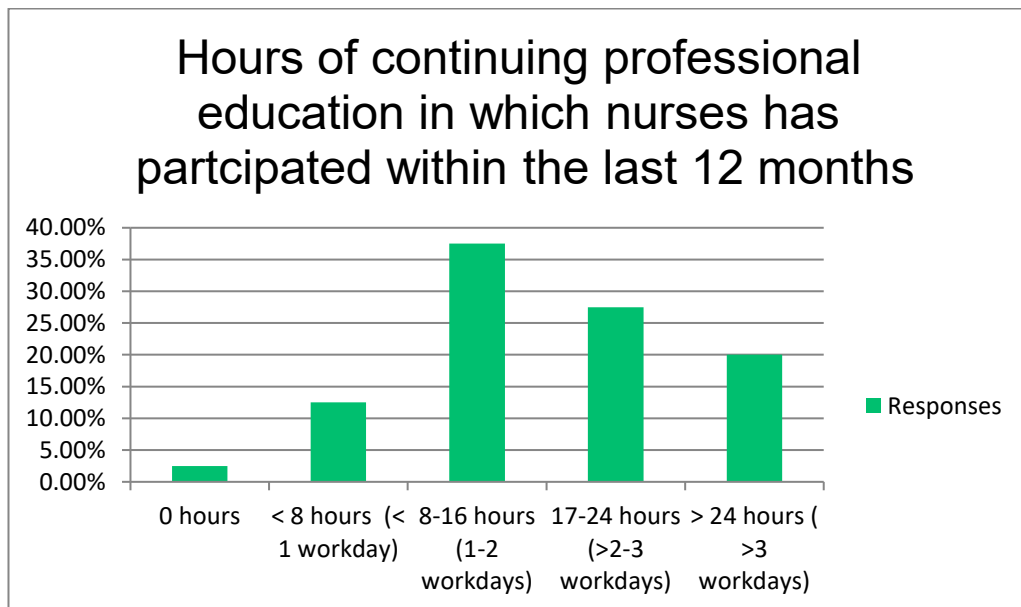
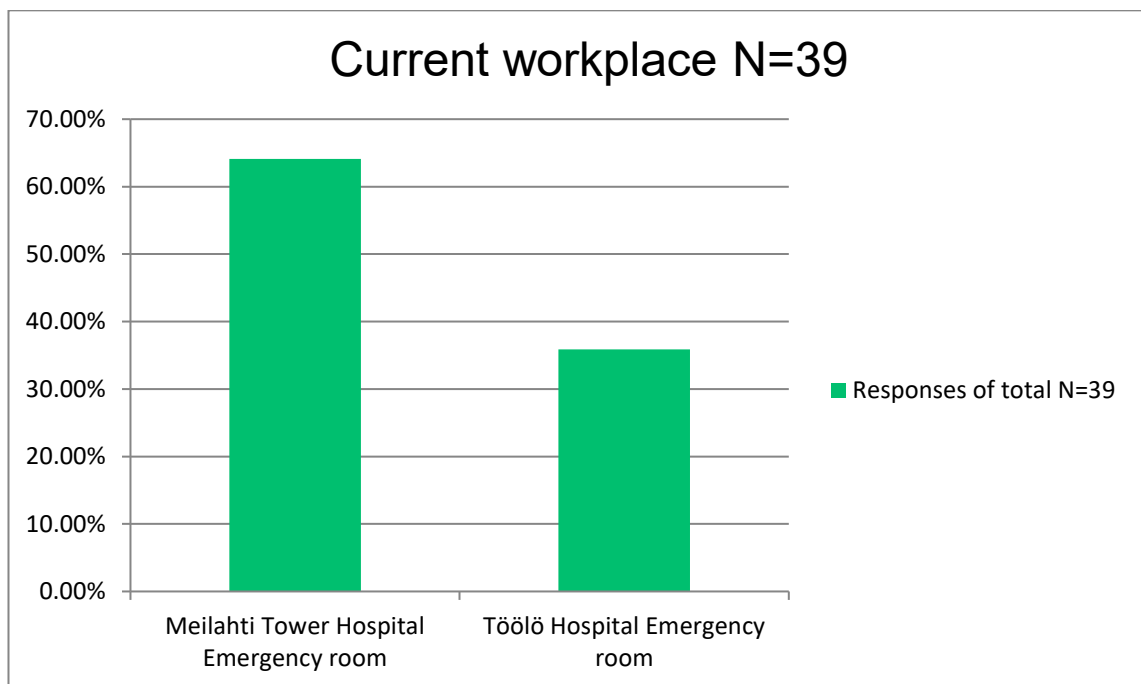


Table 8a and 8b illustrate the questionnaire response rates between the two emergency departments. 40 nurses responded to the questionnaire, 25 (64%) nurses replied from the Meilahti Tower hospital staff and 14 (36%) from Töölö Hospital Emergency room. One of the participants had skipped this question. When comparing the response rate of the total nursing staffs of each hospital, both of the units had the same response rate (~ 30%).

TABLE 8a. Current workplace

Answer Choices	Responses of total N=39	Number of staff	Unit response rate
Meilahti Tower Hospital Emergency room	64,10 %	25	30,12 %
Töölö Hospital Emergency room	35,90 %	14	30,43 %
	Answered	39	
	Skipped	1	

TABLE 8b.



4.3 Factors influencing the motivation to participate in continuing education

The survey questions were grouped into four domains of motivation; 1. Intrinsic motivation - Autonomy, 2. Intrinsic motivation - Mastery / competence, 3. Intrinsic motivation – Relatedness and 4. Extrinsic motivation.

Table 9 demonstrates the participants' motivating factors pertaining to the domain of Intrinsic motivation - Autonomy. Autonomy, in an adult learning context, means that individuals can initiate learning out of personal interest and are able to control

what, when and how are they learning. Interestingly, the result indicated that participants were not so likely to be motivated by factors related to autonomy (mean 2,73, median 2,83, SD 1,15) and this had the lowest score of all the domains. Receiving personal feedback was scored to be the highest (mean 2,92, median 3, SD 1,13) influencing factor under this domain.

TABLE 9. Intrinsic motivation - Autonomy

Descriptive Statistics					
	N	Mean	Median	Mode	SD
Intrinsic Motivation- Autonomy	237	2,75	2,83	2,67	0,860
Valid N (listwise)	237				
Descriptive Statistics					
	N	Mean	Median	Mode	SD
1. Minulla on mahdollisuus vaikuttaa täydennyskoulutuksen sisältöön. I am able to have an input toward the content of the education activity.	40	2,63	3,00	3,00	1,102
2. Minulla on mahdollisuus valita itselleni mieleinen oppimisympäristö (esim. verkko, luokkaopetus, simulaatio). I am able to choose the education method (online, classroom etc.).	39	2,69	3,00	3,00	1,260
3. Täydennyskoulutuksen sisältö perustuu osaamisen tarpeen määrittelyyn, johon itse olen osallistunut. The content of the education activity is based on a learning needs assessment in which I have participated.	40	2,83	3,00	4,00	1,107
4. Täydennyskoulutuksen aikana saan henkilökohtaista palautetta oppimiseni tueksi. I will get personal feedback of my learning during the education activity.	39	2,92	3,00	3,00	1,133
5. Pystyn itse vaikuttamaan täydennyskoulutuksen aikatauluun. I am personally able to set up the schedule for the education activity.	39	2,59	3,00	1,00	1,292
6. Minulla on mahdollisuus asettaa henkilökohtaiset osaamistavoitteet täydennyskoulutukselle. I am able to have personal learning outcomes for the education activity.	40	2,75	3,00	3,00	1,032

Table 10 demonstrates the participants' motivating factors pertaining to the domain of Intrinsic motivation - Mastery/ Competence. Mastery and competence in adult learning content refer to the need to build competence, achieve a feeling of confidence and develop a mastery over the task which is important for the individual. This motivation domain had the highest score (mean 3,55, median 3,75 SD 1,19), meaning that the participants are more likely to be motivated by educational activities which would increase their feeling of confidence, critical thinking and enhance their competence in clinical skills and knowledge related to their work. Nurses are as motivated when they can apply the skills and knowledge into their practical work.

TABLE 10. Intrinsic motivation - Mastery/ Competence

Descriptive Statistics					
	N	Mean	Median	Mode	SD
Intrinsic Motivation- Mastery / Competence	315	3,55	3,75	3,63	0,870
Valid N (listwise)	315				
Descriptive Statistics					
	N	Mean	Median	Mode	SD
7. Täydennyskoulutus kehittää työssäni oleellisia klinisiä taitoja ja tietoja. The education activity will increase my competency in the clinical skills and knowledge relevant for my work.	39	4,13	4,00	5,00	,951
8. Täydennyskoulutus lisää itsetuottamustani työssäni. The education activity will increase my self-confidence in my work.	40	3,88	4,00	5,00	1,159
9. Täydennyskoulutus kehittää kriittisen ajattelun taitojani. The education activity will increase my critical thinking skills.	39	3,67	4,00	4,00	1,034
10. Täydennyskoulutus tukee osaamiseni kehittymistä kohti asiantuntijatasoa. The education activity will increase my competency level towards mastery level.	40	3,73	4,00	5,00	1,198
11. Osaamiseni taso arvioidaan esim. näyttökokeen avulla koulutuksen yhteydessä. My skill or knowledge competency level will be evaluated at the end of the education activity (e.g skill validations).	40	2,45	3,00	3,00	1,061
12. Täydennyskoulutukselle on määritelty selkeät taitojen ja tietojen osaamistavoitteet, jotka minun odotetaan saavuttavan koulutuksen avulla. The education activity has clear learning outcomes describing the level of knowledge or skills I should be able to acquire after completing the activity.	39	3,10	3,00	3,00	1,119
13. Täydennyskoulutuksen osaamistavoitteet asettavat minulle mielekkään haasteen. The learning outcomes of the education activity will set a positive challenge for me.	38	3,39	4,00	4,00	1,079
14. Minulla on mahdollisuus soveltaa opittuja tietoja ja taitoja käytännön työssäni. I am able to apply the skills and knowledge I have learned into practical work	40	4,08	4,00	5,00	1,047

Table 11 demonstrates the participants' motivating factors pertaining to the domain of Intrinsic motivation - Relatedness. This is a sense of connectedness with other individuals, such as work colleagues, in one's work community. Fostering teamwork, mutual respect, reliance on other team member and shared group goals are examples of behavior supporting relatedness. The results (mean 3,28, median 3,50 SD 1,23) indicated that participants are more likely be motivated by education activities which increase the feeling of relatedness. Education activity that improved teamwork skills among the nursing colleagues was scored to be the highest (mean 3,83, median 4,0, SD 0,98) motivational factor. Receiving feedback from others during a group debriefing was scored to be one of the lower (mean 2,78, median 3,0, SD 1,14) influencing factors.

TABLE 11. Intrinsic motivation - Relatedness

Descriptive Statistics					
	N	Mean	Median	Mode	SD
Intrinsic Motivation - Relatedness	237	3,28	3,50	4,00	0,940
Valid N (listwise)	237				
Descriptive Statistics					
	N	Mean	Median	Mode	SD
15. Täydennyskoulutus kehittää minun ja hoitajakollegoideni yhteistyötaitoja. The education activity will improve teamwork skills with my nursing work colleagues.	40	3,83	4,00	4,00	,984
16. Täydennyskoulutus kehittää moniammatillisen ryhmän (hoitajat, lääkärit, laboratorio- ja rtg-henkilöstö jne.) yhteistyötaitoja. The education activity will improve teamwork skills with multidisciplinary teams.	39	3,36	4,00	4,00	1,308
17. Täydennyskoulutus mahdollistaa kokemusperäisen osaamisen jakamisen muiden hoitajien kanssa. The education activity will enable knowledge and experience sharing with my nursing colleagues.	40	3,58	4,00	4,00	1,130
18. Täydennyskoulutus mahdollistaa kokemusperäisen osaamisen jakamisen moniammatillisen ryhmän (hoitajat, lääkärit, laboratorio- ja rtg-henkilöstö jne.) kanssa. The education activity will enable knowledge and experience sharing with multidisciplinary teams.	40	3,13	4,00	4,00	1,362
19. Täydennyskoulutus lisää ammatillista arvostusta hoitajien keskuudessa. The education activity will increase the mutual professional respect among nurses	38	3,03	3,00	3,00	1,241
20. Täydennyskoulutuksen aikana saan palautetta toisilta opiskelijoilta palautekeskustelun muodossa. During the education activity I will receive peer feedback during group debriefing.	40	2,78	3,00	2,00	1,143

Table 12 demonstrates the participants' motivating factors pertaining to the domain of Extrinsic motivation. Motivation is driven by the desire to carry out activities because of external demands or rewards. The result indicated that participants were likely to be motivated by external motivation factors (mean 3,28 median 3,45 SD 1,38). Education activity during work hours (mean 4,18 median 5, SD 1,26) and paid by the employer (mean 3,98 median 5, SD 1,27) were the top two motivational factors in this category. Additionally, education activities to improve patient safety (mean 3,98 median 4, SD 1,02) and activities based on evidence-based practise (mean 3,85 median 4, SD 1,12) were also found to be motivating.

TABLE 12. Extrinsic motivation

Descriptive Statistics					
	N	Mean	Median	Mode	SD
Extrinsic Motivation CM	400	3,28	3,45	3,60	0,720
Valid N (listwise)	400				
Descriptive Statistics					
	N	Mean	Median	Mode	SD
21. Täydennyskoulutus luo minulle mahdollisuuden urallani etenemiseen. The education activity will create an opportunity for my career progression / promotion.	40	2,95	3,00	1,00	1,518
22. Täydennyskoulutukseen osallistumalla pystyn osoittamaan työnantajalleni, että olen ammatillisesti pätevä suoriutumaan työtehtävistäni. The education activity will prove to my employer that I am professionally competent to perform skills needed in my work.	40	3,28	3,50	4,00	1,240
23. Työnantajani kustantaa täydennyskoulutuksen. The education activity will be paid by my employer.	40	3,98	5,00	5,00	1,271
24. Täydennyskoulutus tapahtuu työajallani. I can use my work time to participate the education activity.	40	4,18	5,00	5,00	1,259
25. Täydennyskoulutukseen osallistuminen on tarpeellista, jotta työorganisaationi saavuttaa vaaditut standardit kansainvälisen statuksen saamiseksi (esim. Magnet status, Joint Commission International Accreditation Standards). The education activity is needed by the organization to meet its requirements for international status for Magnet or JCI.	40	3,00	3,00	3,00	1,109
26. Työnantajani on suositellut minulle täydennyskoulutukseen osallistumista. The education activity is recommended by my employer.	40	2,55	3,00	3,00	1,131
27. Täydennyskoulutus on kansainvälinen koulutusohjelma (esim. Euroopan elvytysneuvoston kurssit), johon osallistumalla saan kansainvälisen koulustodistuksen. I will receive international education credits after completing the education activity.	40	2,68	3,00	1,00	1,542
28. Täydennyskoulutuksen tavoitteena on parantaa potilasturvallisuutta työpaikallani. The objective for the education activity is to increase patient safety in my work.	40	3,98	4,00	5,00	1,025
29. Täydennyskoulutuksen vaikuttavuutta (esim. miten koulutus muutti hoitajien toimintatapaa) mitataan organisaatiossani. The effectiveness (e.g. how the nurses are able to apply skills into practice) of the education activity will be measured in my organization	40	2,40	2,50	3,00	1,172
30. Täydennyskoulutuksen sisältö perustuu tieteellisesti tutkittuun näyttöön. The education activity is based on evidence based practice.	40	3,85	4,00	4,00	1,122

4.4 Demographic Factors influencing the motivation to participate in continuing education

Analysis of variance (ANOVA) was used to test for differences between the means pertaining to the demographics and motivation domains. There was statistical significance ($p=0.019$) between intrinsic motivation - mastery/ competence when compared with the number of years of working experience (Table 16.). There was also statistical significance ($p= 0.044$) between Intrinsic motivation - Mastery/ competence when compared with the number years of emergency nursing experience (Table 17). There was no statistical significance between the other motivation domains when compared with number of years working experience, years of emergency nursing experience or hours of continuing education attended (Tables 16-18).

In table 14 the relationships between the four motivation domains and years of nursing experience are presented. As mentioned previously, there was a statistical significance when comparing the means the with intrinsic motivation - mastery/ competence and years of nursing experience. This motivation factor was higher in the group of nurses with less than five year of experience (mean 3.69) and in the group of most experienced nurses with more than 10 years of experience (mean 3.62). The motivational factor to feel competence dropped in a group of nurses with 6-10 years of experience (mean 2.52).

TABLE 13. Years of nursing experience and motivation domains

Years of nursing experience		Intrinsic motivation - Autonomy	Intrinsic motivation - Mastery/ Competence	Intrinsic motivation - Relatedness.	Extrinsic motivation
1-5 years	Mean	2.7308	3.6992	3.4615	3.5077
	N	13	13	13	13
	Std. Deviation	.70231	.69551	.84753	.58233
	Median	2.6667	3.7500	3.5000	3.6000
6-10 years	Mean	2.9333	2.5250	2.9333	3.2600
	N	5	5	5	5
	Std. Deviation	1.05145	1.05475	1.12793	.82037
	Median	3.3333	2.5000	2.8333	3.5000
>10 years	Mean	2.7121	3.6282	3.2576	3.1545
	N	22	22	22	22
	Std. Deviation	.93602	.79994	.97281	.77504
	Median	2.7500	3.8125	3.2500	3.3000
Total	Mean	2.7458	3.5134	3.2833	3.2825
	N	40	40	40	40
	Std. Deviation	.86148	.86700	.94220	.72320
	Median	2.8333	3.6875	3.5000	3.4500

Table 14 presents the relationships between the four motivation domains and years of emergency nursing experience. As mentioned previously, there was a statistical significance when comparing the means of Intrinsic motivation - mastery/ competence with years of emergency nursing experience. This motivation factor was higher in the group of nurses with less than five year of experience (mean 3.48) and in the group of most experienced nurses with more than 10 years of experience (mean 3.75). The motivational factor to feel competence dropped in a group of nurses holding 6-10 years of experience (mean 2,90). Since the group of less than one year of experience had only N=2, it can be left outside of the comparison.

TABLE 14. Years of emergency nursing experience and motivation domains

Years of emergency nursing experience		Intrinsic motivation Autonomy	Intrinsic motivation - Mastery/ Compe- tence	Intrinsic motivation Related- ness.	Extrinsic motivation
< 1 year	Mean	2.8333	4.3750	3.0833	3.9000
	N	2	2	2	2
	Std. Deviation	.23570	.35355	.82496	.42426
	Median	2.8333	4.3750	3.0833	3.9000
1-5 years	Mean	2.5833	3.4866	3.3472	3.3333
	N	12	12	12	12
	Std. Deviation	.85428	.71745	1.04557	.66924
	Median	2.6667	3.6250	3.5000	3.5500
6-10 years	Mean	3.0556	2.9028	3.1852	3.2667
	N	9	9	9	9
	Std. Deviation	.73598	1.15883	.80123	.82006
	Median	3.0000	3.0000	2.8333	3.5000
>10 years	Mean	2.6863	3.7542	3.3137	3.1824
	N	17	17	17	17
	Std. Deviation	.97696	.65913	1.01701	.74769
	Median	2.8333	3.7500	3.5000	3.4000
Total	Mean	2.7458	3.5134	3.2833	3.2825
	N	40	40	40	40
	Std. Deviation	.86148	.86700	.94220	.72320
	Median	2.8333	3.6875	3.5000	3.4500

Table 15 presents the relationships between the four motivation domains and hours of continuing education attended within the past 12 months. As mentioned previously, there was no statistical significance when comparing the means of hours of continuing education attended with all four motivation domains.

TABLE 15. Hours of continuing education attended within past 12 months and motivation domains

Hours of continuing education within past 12 months		Intrinsic motivation - Autonomy	Intrinsic motivation - Mastery/ Competence	Intrinsic motivation - Relatedness	Extrinsic motivation
0 hours	Mean	1.3333	3.6250	4.0000	2.9000
	N	1	1	1	1
	Std. Deviation
	Median	1.3333	3.6250	4.0000	2.9000
< 8 hours	Mean	2.3333	3.6750	3.5667	3.4000
	N	5	5	5	5
	Std. Deviation	.78174	.43839	1.14018	.61644
	Median	2.6667	3.6250	3.6667	3.6000
8-16 hours	Mean	2.8222	3.6774	3.3556	3.1733
	N	15	15	15	15
	Std. Deviation	.64693	.76582	.84013	.71160
	Median	2.6667	3.8750	3.8333	3.2000
17-24 hours	Mean	2.5333	3.6000	2.6500	3.1600
	N	10	10	10	10
	Std. Deviation	1.13801	.81820	.94428	1.00907
	Median	2.7500	3.6875	2.6667	3.3000
> 24 hours	Mean	3.2407	3.0417	3.6296	3.5778
	N	9	9	9	9
	Std. Deviation	.65145	1.20869	.82402	.40242
	Median	3.0000	3.3750	3.8333	3.5000
Total	Mean	2.7458	3.5134	3.2833	3.2825
	N	40	40	40	40
	Std. Deviation	.86148	.86700	.94220	.72320
	Median	2.8333	3.6875	3.5000	3.4500

TABLE 16. Analysis of variance (ANOVA) between the means of years of nursing experience and motivation domains

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Auto-nomy	Between Groups	.204	2	.102	.131	.877
	Within Groups	28.740	37	.777		
	Total	28.944	39			
Mas-tery/ Com-pe-tence	Between Groups	5.624	2	2.812	4.391	.019
	Within Groups	23.693	37	.640		
	Total	29.316	39			
Relat-ed-ness.	Between Groups	1.040	2	.520	.573	.569
	Within Groups	33.582	37	.908		
	Total	34.622	39			
Extrin-sic mo-tivation	Between Groups	1.022	2	.511	.976	.386
	Within Groups	19.376	37	.524		
	Total	20.398	39			

TABLE 17. Analysis of variance (ANOVA) between the means of years of emergency nursing experience and motivation domains

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Auto-nomy	Between Groups	1.256	3	.419	.544	.655
	Within Groups	27.688	36	.769		
	Total	28.944	39			
Mas-tery/ Com-pe-tence	Between Groups	5.835	3	1.945	2.982	.044
	Within Groups	23.481	36	.652		
	Total	29.316	39			
Relat-ed-ness.	Between Groups	.231	3	.077	.081	.970
	Within Groups	34.391	36	.955		
	Total	34.622	39			
Extrin-sic mo-tivation	Between Groups	.966	3	.322	.597	.621
	Within Groups	19.431	36	.540		
	Total	20.398	39			

TABLE 18. Analysis of variance (ANOVA) between the means of hours of continuing education attended within past 12 months and motivation domains

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Auto-nomy	Between Groups	5.589	4	1.397	2.094	.102
	Within Groups	23.354	35	.667		
	Total	28.944	39			
Mas-tery/ Com-pe-tence	Between Groups	2.624	4	.656	.860	.497
	Within Groups	26.692	35	.763		
	Total	29.316	39			
Relat-ed-ness.	Between Groups	6.084	4	1.521	1.865	.139
	Within Groups	28.539	35	.815		
	Total	34.622	39			
Extrin-sic mo-tivation	Between Groups	1.329	4	.332	.610	.658
	Within Groups	19.069	35	.545		
	Total	20.398	39			

5 DISCUSSION AND RECOMMENDATION

The study focused on describing the influencing factors which motivate emergency room nurses to participate in continuing professional education. Theoretical framework was based on adult learning theory and motivation was approached by self-determination theory. Additionally, the study explored the kind of continuing professional education activities in which nurses currently participate and find motivating.

5.1 Discussion of the results

The survey was carried out in two large emergency departments in Finland. Nurses participating in the study were generally very experienced nurses, over half of them holding over 10 years of nursing experience. Additionally, over 65% of the nurses had more than five years of emergency nursing experience. The most common continuing education activities pursued by the nurses were conferences, simulation education and workplace-conducted in-service training. None of the nurses in this study had participated in speciality studies within the past 12 months, but the limitation for this question is that it did not capture the nurses' participation in speciality studies prior to this time period.

Only half of the nurse participated in-service education in their workplace in the past 12 months. In-service education can be used to validate nurses' skills and competencies e.g. for new procedures or new evidence-based practise guidelines. The evaluation of skills or knowledge competencies was also found to be a relatively low motivating factor. Since annual skill validations are not a common practice among Finnish nurses, this cultural factor could be the contributing factor for this result.

The amount of continuing education hours in which nurses have participated within the past 12 months was relatively low. Only 20% of the participants had over 3 days of continuing education, which is the recommendation by The Finnish

Government Principle from 2002 (STM 2004, p.25). Since there are no mandatory requirements for nursing license renewal in Finland, participating in continuing education activities is based on the motivation of the nurses and requirements set by the employer.

The domain of intrinsic motivation - mastery / competence was found to be the most influencing factor for nurses' motivation to participate in continuing education. Mastery and competence refer to the feeling of effectiveness and confidence in the required skills or knowledge. According to the study results, emergency nurses are more likely to be motivated by educational activities which increase their feeling of confidence, critical thinking and enhance their competence in clinical skills and knowledge related to their work. They are also motivated when they can apply what they have learned into to their current work. These finding can be linked with previous research (Jaradeh & Hamdeh, 2009.; Murphy, Cross, & McGuire, 2006) where it was discovered that improved self-esteem and improved competency were motivating factors to participate in continuing education. Additionally, the findings of this research are supported by adult learning theory (Bierema 2014), since we know that adult learners have a desire to immediately apply the knowledge they have learned, are driven by enhanced self-esteem and have a strong need to know the reason for learning. Adult learners are motivated when they can transfer their learning into practical work.

The motivation for competency and subject mastery among emergency nurses can be linked to the specific requirements of emergency nursing; the unpredictable, fast-paced work environment where nurses are required to make critical decisions and perform a large variety of skills in emergency situations. Interestingly, this motivation factor was higher in the group of nurses with less than five years of emergency nursing experience and in the group of most experienced nurses with more than 10 years of emergency nursing experience. The motivational factor to feel competence dropped in the group of nurses holding 6-10 years of emergency nursing experience. The same result was also seen when comparing the motivation for competency with mastery and years of general nursing experience.

Increasing the feeling of relatedness was found to be a likely motivational factor for participants undertaking education activities. Relatedness is a sense of connectedness with other individuals, like work colleagues, in one's work community. Fostering teamwork, mutual respect, reliance on other team member and shared group goals are examples of behaviour supporting relatedness. According to the study results, emergency nurses are more likely to be motivated by education activities that improve teamwork skills among the nursing colleagues. The use of collaborative learning methods can increase the feeling of relatedness. Surprisingly, receiving feedback from others during a group de-briefing was not a significant influencing factor. Group debriefings are part of the simulation education, which was the second most common education activity in which the nurses had participated.

The study results indicate that participants were not so likely to be motivated by the factors related to autonomy. Autonomy in an adult learning context means that an individual can initiate learning out of personal interest and are able to control what, when and how are they learning. Receiving personal feedback was scored to be the highest influencing factor under this domain. Positive feedback is predicted to enhance intrinsic motivation when people feel a sense of autonomy with respect to the activity (Ryan & Deci, 2000). Personalized learning outcomes, or, education activity based on learning needs assessment, were found to be relatively low factors influencing motivation. This finding did not align with a previous study (Viljoen et al., 2017) in which learning needs assessment was found to increase the motivation of nurses to attend continuing education activities by discovering the gaps in their skills and knowledge. Internal motivation can be increased by helping nurses become aware of the gaps in their skills or knowledge. Adult learners need to know what they need to learn, why they need to learn it and how this can be applied to their current practice. Uncovering these gaps with a learning needs assessment can be helpful when implementing mandatory training programs.

The results also indicated that participants were likely to be motivated by extrinsic motivation factors. Motivation is driven by the desire to undertake activities be-

cause of external demands or rewards. In this study the top two external motivational factors were education paid by the employer and undertaken during work hours. Additionally, education activities to improve patient safety and activities based on evidence-based practise were found to be motivating.

5.2 Implications for practice and recommendations

The results of this research are preliminary but can be used to some extent when developing motivating continuing education activities to better meet emergency nurses' needs in the future. According to the study results, emergency nurses are more likely to be motivated by educational activities which increase their feeling of competence and development a mastery over a task that is important for their job. Motivation can also be enhanced when nurses can apply skills and knowledge directly to their work. This could include education activities which enhance nurses' critical thinking, procedural competency, clinical knowledge and practice. To feel competent, nurses need to be able to recognize their success and develop a confidence in their skills and abilities to manage complex situations. Both summative and formative assessments during or after education activities can be used to provide constructive feedback to build the feeling of success. The feeling of competency will help nurses improve their self-esteem and better cope with unpredictable emergency situations, which are common in the context of emergency nursing.

The results also indicated that the number of years of nursing experience and emergency nursing experience has an effect on the need for competency. The interesting question is why the motivational factor related to the feeling of competency and mastery was lower in the group of nurses with 6-10 years of nursing or emergency nursing experience. The author recommends this be a subject of future study.

Due the increased interest in international hospital accreditations and recognition programs, it has become a current topic of interest among Finnish healthcare

system. The Joint Commission of International (JCI) is a worldwide health care accreditation body and JCI-accredited hospitals have been successfully inspected to rigorous international standards in quality and patient safety. JCI requires each staff members to receive on going education and training to maintain or advance their skills and knowledge. (JCI n.d.) The Magnet Recognition is an award from the American Nurses Credential Center (ANCC) which a healthcare organization can receive if it can fulfil the requirements for nursing excellence and high-quality patient care. A Magnet Recognition requirement is that continuing education needs assessment must be offered to all registered nurses and it must demonstrate that the needs of the nurses in the various hospital settings are being addressed. Speciality certifications are also eligibility requirements of Magnet Recognition. ("Magnet Recognition Program® | ANCC," n.d.)

In order to be able to apply for and achieve International Magnet Recognition or JCI accreditation, Finnish hospitals must encourage and support their nurses for ongoing learning and professional growth. To achieve high compliance rates for these education offerings, educators planning the activities must be aware of the factors influencing the nurses' motivation to participate. Further study on Finnish nurses' attitudes towards to learning needs assessment would certainly be beneficial as learning needs assessment is a requirement when moving towards international hospital accreditations and it has been shown to increase motivation to participate in continuing education.

Another interesting finding was that group feedback was scored as a low motivational factor. This type of feedback is often used in a simulation debriefing when the nurses reflect on their performance. Although this finding is based only on the results of one question, it would be an interesting topic for future research as simulation is widely used in healthcare education. The possible effects of Finnish cultural characteristics toward group feedback could also be explored.

5.3 Limitations

This study showed that the main influencing factor effecting nurses' motivation to participate in continuing education was the need to feel competency and achieve mastery over a task that is important for the individual. The study was conducted in two large emergency departments in southern Finland and the final sample size was relatively small (N=40). Both of these emergency departments have their respective specialities which means their patient presentations and acuity levels are not consistent with emergency rooms in other hospitals. The instrument was developed by the researcher and pilot tested in a small group of nurses. However, if used in similar kind of studies the it would need further testing for its validity and reliability. The study is based on self-reported data, which might be subject to some response biases by the participants. The statistical analysis was carried out utilising basic statistical methodology and the interpretation was carried out by the researcher who is in a novice in statistical analysis. Reliability test result indicated borderline acceptable internal consistency, which could indicate inconsistent correlation between the sub-questions in the four motivation domains. The study results should only be used as a preliminary evaluation of the factors influencing nurses' motivation to participate in continuing education, and therefore should not be generalized to the emergency nurse population in Finland.

REFERENCES

- Brekelmans, G. (2016). *CONTINUING PROFESSIONAL DEVELOPMENT FOR NURSES MISSION OR PROFESSION?* 147. Tilburg University. Department of Human Recourse Studies. Doctoral thesis.
- Brekelmans, G., F. Poell, R., & van Wijk, K. (2013). Factors influencing continuing professional development: A Delphi study among nursing experts. *European Journal of Training and Development*, 37(3), 313–325. <https://doi.org/10.1108/03090591311312769>
- Cooper, E. (2009). Creating a Culture of Professional Development: A Milestone Pathway Tool for Registered Nurses. *The Journal of Continuing Education in Nursing*, 40(11), 501–508. <https://doi.org/10.3928/00220124-20091023-07>
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed). Boston: Pearson.
- Deci, E. L., & Ryan, R. M. (Eds.). (2004). *Handbook of self-determination research* (Softcover edition). Rochester, NY: University of Rochester Press.
- Directive 2013/55/EU of the European Parliament and of the Council of 20 November 2013 Amending Directive 2005/36/EC on the Recognition of Professional Qualifications and Regulation (EU) No 1024/2012 on Administrative Cooperation through the Internal Market Information System (the IMI Regulation) Text with EEA Relevance,” Accessed August 16, 2018.
- Emergency nursing association (ENA) 2019. *Emergencynurseorientation.pdf*. (n.d.). Retrieved from https://www.ena.org/docs/default-source/resource-library/practice-resources/position-statements/emergencynurseorientation.pdf?sfvrsn=e3ee2b66_20
- Gagné, M. (Ed.). (2015). *The Oxford handbook of work engagement, motivation, and self-determination theory* (First issued as an Oxford University Press paperback). Oxford New York: Oxford University Press.
- Giri, K., Frankel, N., Tulenko, K., Puckett, A., Bailey, R., Ross, H., & International, I. (n.d.). *Keeping Up to Date: Continuing Professional Development for Health Workers in Developing Countries*. 6.
- Healthcare—Valvira. (n.d.). Retrieved August 24, 2018, from <http://www.valvira.fi/web/en/healthcare>

Health Care Professionals Act. Ministry of Social Affairs and Health, Finland N.B. Unofficial translation. Legally binding only in Finnish and Swedish. No. 559/1994 Issued in Naantali on 28 June 1994.

Health Care Act, Ministry of Social Affairs and Health, Finland N.B. Unofficial translation. Legally binding only in Finnish and Swedish. No 1326/2010. Issued in Helsinki on 30 December 2010.

HUS - Home. (n.d.). Retrieved September 13, 2019, from <https://www.hus.fi/en/Pages/default.aspx>

Institute of Medicine. (2010). *Redesigning Continuing Education in the Health Professions*. <https://doi.org/10.17226/12704>

Jaradeh, M., & Hamdeh, H. A. (2010.). *Nurses' Experiences of Continuous Professional Development*. 10. *Journal of Medicine* 44(3) 314-321

Magnet Recognition Program® | ANCC. (n.d.). Retrieved September 28, 2019, from ANA website: <https://www.nursingworld.org/organizational-programs/magnet/>

Merriam, S. B., & Bierema, L. L. (2014). *Adult learning: Linking theory and practice* (First edition). San Francisco, CA: Jossey-Bass, a Wiley brand.

Murphy, C., Cross, C., & McGuire, D. (2006). The motivation of nurses to participate in continuing professional education in Ireland. *Journal of European Industrial Training*, 30(5), 365–384. <https://doi.org/10.1108/03090590610677926>

NMBI - NMBI Scope of Practice: Continuing professional development. (n.d.). Retrieved July 6, 2019, from <https://www.nmbi.ie/Standards-Guidance/Scope-of-Practice/Considerations-in-Determining-Scope/Continuing-Professional-Development>

Parahoo, K. (2006). *Nursing research: Principles, process and issues* (2nd ed). London: Macmillan.

Policy and Development in Higher Education and Science.” Opetus- ja kulttuuriministeriö. Accessed May 21, 2018. <http://minedu.fi/en/policy-and-development-in-higher-education-and-science>.

Joint Commission International: Patient Safety, Accreditation Resources, Quality Improvement, Health Care Consulting. (n.d.). Retrieved October 11, 2019, from Joint Commission International website: <https://www.joint-commissioninternational.org/>

- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>
- Schweitzer DJ, & Krassa TJ. (2010). Deterrents to Nurses' Participation in Continuing Professional Development: An Integrative Literature Review. *Journal of Continuing Education in Nursing*, 41(10), 441–447. <https://doi.org/10.3928/00220124-20101001-04>
- Selfdeterminationtheory.org – Theory. (n.d.). Retrieved December 9, 2018, from <http://selfdeterminationtheory.org/theory/>
- Sosiaali- ja terveysministeriö (STM) 2010. Yhtenäiset päivystyshoidon perusteet. Työryhmän raportti. Sosiaali- ja terveysministeriön selvityksiä 2010:4.
- Sosiaali- ja terveysministeriö (STM) 2004. Terveystieteiden tutkimuskeskuksen täydennyskoulutuksen suositukset -työryhmä. Terveystieteiden tutkimuskeskuksen täydennyskoulutussuositu
Helsinki: Sosiaali- ja terveysministeriö: Edita 2004.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Tjin A Tsoi, S. L., de Boer, A., Croiset, G., Kusrkar, R. A., & Koster, A. S. (2018). A Longitudinal Approach to Changes in the Motivation of Dutch Pharmacists in the Current Continuing Education System. *American Journal of Pharmaceutical Education*, 82(2). <https://doi.org/10.5688/ajpe6199>
- Tranquillo, J., & Stecker, M. (2016). Using intrinsic and extrinsic motivation in continuing professional education. *Surgical Neurology International*, 7(8), 197. <https://doi.org/10.4103/2152-7806.179231>
- Viljoen, M., Coetzee, I., & Heyns, T. (2017). Critical Care Nurses' Reasons for Poor Attendance at a Continuous Professional Development Program. *American Journal of Critical Care*, 26(1), 70–76. <https://doi.org/10.4037/ajcc2017412>
- World Health Organization. (2013). *Transforming and scaling up health professionals' education and training: World Health Organization guidelines 2013*. Retrieved from <http://www.ncbi.nlm.nih.gov/books/NBK298953/>

APPENDICES

Appendix 1. Saatekirje

Hyvä päivystyspoliklinikka hoitaja!

Pyydän sinua osallistumaan tutkimukseen, jossa kartoitetaan päivystyspoliklinikka sairaanhoitajien osallistumismotivaatioon vaikuttavia tekijöitä ammatilliseen täydennyskoulutukseen liittyen. Tutkimus toteutetaan Meilahden ja Töölön sairaalan päivystyspoliklinikkahoitajien keskuudessa. Tutkimuksesta saatuja tietoja voidaan tulevaisuudessa käyttää suunniteltaessa täydennyskoulutuksia vastaamaan päivystyspoliklinikka hoitajien tarpeita. Kyseessä on kyselytutkimus, johon vastaamiseen sinulta kuluu aikaa noin 5-10 minuuttia. Haastatteluun osallistuminen on vapaaehtoista ja vastaamalla sähköiseen kyselyyn annat suostumuksesi haastattelumateriaalin käytöstä tutkimukseen. Tutkija takaa tutkimukseen osallistuvien nimettömyyden ja tunnistamattomuuden kaikissa tutkimusprosessin vaiheissa. Tutkimus on ylemmän ammattikorkeakoulun opinnäytetyö ja tutkijana toimii YAMK-opiskelija Minna Kemppainen. HUS:n yhteyshenkilönä toimii hoitotyön kliininen opettaja Elina Koota. Kaikissa tutkimukseen liittyvissä kysymyksissä voit olla suoraan yhteydessä edellä mainittuihin henkilöihin.

Kiitos ajastasi ja osallistumistasi tutkimukseen.

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Appendix 2. Kyselylomake / Questionnaire

3 (1)

Kuinka monta vuotta sinulla on kokemusta hoitotyöstä? / How many years of nursing experience you have ?

< 1 vuosi / year	
1-5 vuotta / years	
6-10 vuotta / years	
>10 vuotta	

Kuinka monta vuotta sinulla on kokemusta päivystyshoitotyöstä? / How many years of emergency nursing experience you have ?

< 1 vuosi / year	
1-5 vuotta / years	
6-10 vuotta / years	
>10 vuotta / years	

Mikä on sinun korkein terveysalan koulutuksesi? / Your highest education level:

Kouluasteen perushoitajan / lääkintävahvistajan tutkinto / Licensed Practical Nurse (Diploma)	
Toisen asteen lähhoitajan tutkinto / Vocational upper secondary education - Licensed practical nurse	
Sairaanhoidajan tutkinto (opisto / AMK) / Registered Nurse (Diploma / BSN)	
YAMK-tutkinto / Masters Degree (University of Applied Sciences)	
Terveystieteiden maisterin tutkinto / Master of Science of Nursing	

Mihin ammatilliseen täydennyskoulutukseen olet osallistunut viimeisen vuoden aikana? / Continuing education activities, in which you have participated within the last 12 months:

Lyhyet 1-2 päivän pituiset koulutuspäivät / kongressit / Seminar or conference (Duration 1-2 days)	
Simulaatiokoulutus / Simulation education	
Työpaikallani tapahtuva täydennyskoulutus / In-service education in my workplace	
Erikoistumisopinnot / Specialty certification programs	
Verkkokurssi / Online course	
Kansainvälinen koulutusohjelma (esim. Euroopan elvytysneuvoston elvytyskurssi) / International course (e.g. European Resuscitation Council Life Support course)	
Muu, mikä? / Other ?	

Kuinka monta tuntia olet osallistunut ammatilliseen täydennyskoulutukseen viimeisen 12 kuukauden aikana yhteensä? / How many hours of continuous professional education have you participated in within the last 12 months?

0 tuntia / 0 hours	
< 8 tuntia (alle 1 työpäivä) < 8 hrs (< 1 workday)	
8-16 tuntia (1-2 työpäivää) 8-16 hrs (1-2 workdays)	
17-24 tuntia (2-3 työpäivää) 17-24 hrs (> 2-3 workdays)	
> 24 tuntia (yli 3 työpäivää) > 24 hrs (> 3 workdays)	

Työpaikkasi tällä hetkellä / Your current workplace:

Meilahden sairaalan päivystyspoliklinikka / Meilahti Tower Hospital Emergency Department	
Töölön sairaalan tapaturma-asema / Töölö Hospital Emergency Department	

Arvioi asteikolla 1-5, kuinka paljon seuraavat tekijät vaikuttavat motivaatioosi osallistua ammatilliseen täydennyskoulutukseen.	1.	2.	3.	4.	5.
Please indicate to what extent the following factors would influence your motivation to participate in continuing education.	Ei lainkaan Not at all	Jonkin verran Slightly	Kohdallaisesti Somewhat	Paljon Very much	Erittäin paljon Extremely
Intrinsic motivation- Autonomy					
1. Minulla on mahdollisuus vaikuttaa täydennyskoulutuksen sisältöön. I am able to have an input toward the content of the education activity.					
2. Minulla on mahdollisuus valita itselleni mieleinen oppimisympäristö (esim. verkko, luokkaopetus, simulaatio). I am able to choose the education method (online, classroom etc.).					
3. Täydennyskoulutuksen sisältö perustuu osaamisen tarpeen määrittelyyn, johon itse olen osallistunut. The content of the education activity is based on a learning needs assessment in which I have participated.					
4. Täydennyskoulutuksen aikana saan henkilökohtaista palautetta oppimiseni tueksi. I will get personal feedback of my learning during the education activity.					
5. Pystyn itse vaikuttamaan täydennyskoulutuksen aikatauluun. I am personally able to set up the schedule for the education activity.					
6. Minulla on mahdollisuus asettaa henkilökohtaiset osaamistavoitteet täydennyskoulutukselle. I am able to have personal learning outcomes for the education activity.					

Intrinsic motivation - Mastery / competence					
7. Täydennyskoulutus kehittää työssäni oleellisia klinisiä taitoja ja tietoja. The education activity will increase my competency in the clinical skills and knowledge relevant for my work.					
8. Täydennyskoulutus lisää itsetuottamustani työssäni. The education activity will increase my self-confidence in my work.					
9. Täydennyskoulutus kehittää kriittisen ajattelun taitojani. The education activity will increase my critical thinking skills.					
10. Täydennyskoulutus tukee osaamiseni kehittymistä kohti asiantuntijatasoa. The education activity will increase my competency level towards mastery level.					
11. Osaamiseni taso arvioidaan esim. näyttökokeen avulla koulutuksen yhteydessä. My skill or knowledge competency level will be evaluated at the end of the education activity (e.g skill validations).					
12. Täydennyskoulutukselle on määritelty selkeät taitojen ja tietojen osaamisavoitteet, jotka minun odotetaan saavuttavan koulutuksen avulla. The education activity has clear learning outcomes describing the level of knowledge or skills I should be able to acquire after completing the activity.					
13. Täydennyskoulutuksen osaamisavoitteet asettavat minulle mielekkään haasteen. The learning outcomes of the education activity will set a positive challenge for me.					
14. Minulla on mahdollisuus soveltaa opittuja tietoja ja taitoja käytännön työssäni. I am able to apply the skills and knowledge I have learned into practical work					

Intrinsic motivation - Relatedness					
15. Täydennyskoulutus kehittää minun ja hoitajakollegoideni yhteistyötaitoja. The education activity will improve teamwork skills with my nursing work colleagues.					
16. Täydennyskoulutus kehittää moniammatillisen ryhmän (hoitajat, lääkärit, laboratorio- ja rtg-henkilöstö jne.) yhteistyötaitoja. The education activity will improve teamwork skills with multidisciplinary teams.					
17. Täydennyskoulutus mahdollistaa kokemuseräisen osaamisen jakamisen muiden hoitajien kanssa. The education activity will enable knowledge and experience sharing with my nursing colleagues.					
18. Täydennyskoulutus mahdollistaa kokemuseräisen osaamisen jakamisen moniammatillisen ryhmän (hoitajat, lääkärit, laboratorio- ja rtg-henkilöstö jne.) kanssa. The education activity will enable knowledge and experience sharing with multidisciplinary teams.					
19. Täydennyskoulutus lisää ammatillista arvostusta hoitajien keskuudessa. The education activity will increase the mutual professional respect among nurses					
20. Täydennyskoulutuksen aikana saan palautetta toisilta opiskelijoilta palautekeskustelun muodossa. During the education activity I will receive peer feedback during group debriefing.					
Extrinsic motivation – CM					
21. Täydennyskoulutus luo minulle mahdollisuuden urallani etenemiseen. The education activity will create an opportunity for my career progression / promotion.					
22. Täydennyskoulutukseen osallistumalla pystyn osoittamaan työnantajalleni, että olen ammatillisesti pätevä suorituttuun työhöhtävistäni. The education activity will prove to my employer that I am professionally competent to perform skills needed in my work.					

23. Työntantajani kustantaa täydennyskoulutuksen. The education activity will be paid by my employer.					
24. Täydennyskoulutus tapahtuu työajallani. I can use my work time to participate the education activity.					
25. Täydennyskoulutukseen osallistuminen on tarpeellista, jotta työorganisaationi saavuttaa vaaditut standardit kansainvälisen statuksen saamiseksi (esim. Magnet status, Joint Commission International Accreditation Standards). The education activity is needed by the organization to meet its requirements for international status for Magnet or JCI.					
26. Työntantajani on suositellut minulle täydennyskoulutukseen osallistumista. The education activity is recommended by my employer.					
27. Täydennyskoulutus on kansainvälinen koulutusohjelma (esim. Euroopan elvytysneuvoston kurssit), johon osallistumalla saan kansainvälisen koulutustodistuksen. I will receive international education credits after completing the education activity.					
28. Täydennyskoulutuksen tavoitteena on parantaa potilasturvallisuutta työpaikallani. The objective for the education activity is to increase patient safety in my work.					
29. Täydennyskoulutuksen vaikuttavuutta (esim. miten koulutus muutti hoitajien toimintatapaa) mitataan organisaatiossani. The effectiveness (e.g. how the nurses are able to apply skills into practice) of the education activity will be measured in my organization.					
30. Täydennyskoulutuksen sisältö perustuu tieteellisesti tutkittuun näyttöön. The education activity is based on evidence based practice.					

Appendix 3. Tutkimuslupa HUS (sivu 1.)

30.7.2019

Tutkijan työpöytä

HELSINGIN JA UUDENMAAN SAIRAANHOITOPAIIRI

HYKS-SAIRAANHOITOALUE: SAIRAANHOITOALUEEN JOHTO, HYKS

Päätös tutkimusluvasta

Opinnäytetyön tekijä / tekijät:	Minna Kemppainen
Yliopisto / amk:	Tampereen Ammattikorkeakoulu
Opinnäytetyön nimi:	The Motivational Factors for Participation in Continuing Professional Education of Emergency Room Nurses in Finland
HUS tutkimuksen vastuhenkilö:	Elina Koota
Opinnäytetyön ohjaaja / ohjaajat:	Shaidul Kazi

Tutkimuksen suorituspaikka

HYKS-SAIRAANHOITOALUE: HYKS AKUUTTI 1 Puolto, Karioja Anitta Hannele, 01/07/2019

HYKS-SAIRAANHOITOALUE: HYKS TUKIELIN- JA PLASTIIKKAKIRURGIA / Puolto, Mäkelä Terhi, 29/05/2019

HYKS-SAIRAANHOITOALUE: HYKS TUKIELIN- JA PLASTIIKKAKIRURGIA 1 Puolto, Mäkelä Terhi, 16/07/2019

- AineistoPotilaat/Omaiset, Lukumäärä:
- Henkilökunta, Lukumäärä:
- 120 AsiakirjatRekisterit,
- Lukumäärä: Muu, mikä,
- Lukumäärä:

Tutkimusmenetelmät Kysely

Tutkimuslupa myönnetään edellyttäen, että tutkimusluvan saaja toimittaa tutkimuksen valmistuttua raportin tutkimusluvan myöntäjälle (R-lomake)

Muut ehdot:

Appendix 3. Tutkimuslupa HUS (sivu 2.)

Tutkimusluvan alkamispäivä:	30.07.2019
Tutkimusluvan päättymispäivä:	31.12.2019
Tutkimusluvan hyväksyjä:	Renholm Marja
Hyväksyjän tulosyksikkö:	HYKS-SAIRAANHOITOALUE: SAIRAAHOITOALUEEN JOHTO, HYKS
Hyväksyjän toimi:	Sairaanhoitoalueen johto, johtava ylihoitaja
Tutkimusluvan myöntämiseen liittyvät asiakirjat on tallennettu Tieteellisen tutkimuksen rekisteriohjelmaan	